

A NEW SPECIES OF MYROCARPUS (LEGUMINOSAE)
AND A BRIEF RESUME OF THE GENUS

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The small genus Myrocarpus Freire Allemão has hitherto been known only from southern Brazil, Paraguay, and northeastern Argentina. The new species from Venezuela, described below, is an interesting disjunct.

Like the related genera, Myroxylon L. f. and Myrospermum Jacq., it is balsamiferous, and when sterile can be recognized by leaflets with pellucid dots and dashes. Myrocarpus has smaller flowers, the pods are elongate, compressed, usually 3-5-seeded, with marginal wings, in contrast to those of Myroxylon and Myrospermum which are commonly 1-seeded, with a basal wing.

Some of the species of Myrocarpus are poorly known, and I am reserving judgment as to how "good" they are. The following key and descriptions are based on what information I have at hand.

Myrocarpus, with Myroxylon and Myrospermum, has been placed in the faboid tribe Sophoreae by most authors. Hutchinson (Gen. Fl. Pl. 1: 314. 1964) included Myrocarpus in his expanded interpretation of the tribe Cadiæ, which he transferred from the Caesalpiaceae to the Fabaceae, but retained Myroxylon and Myrospermum in the Sophoreae. Much more study is needed of the genera transitional between the caesalpinoid and faboid Leguminosae before a satisfactory understanding and classification can be reached. For the time being, I prefer to retain Myrocarpus in the Sophoreae sensu latior.

MYROCARPUS Freire Allemão, Diss. Leg. 26 Oct. 1847.

Trees, unarmed, balsamiferous; leaves alternate, imparipinnate, (1-) 3-9 (-10)-foliolate; leaflets alternate, ovate to lanceolate-ovate, glabrous, with pellucid dots and dashes; stipules minute, caducous; stipels lacking; inflorescences axillary or pseudoterminal, many-flowered spicate racemes; bracts minute, deltoid; bracteoles lacking; flowers small, fragrant, about 6-8 mm. long; calyx turbinate-campanulate, subsericeous 3-4 mm. long with 5 short, subequal lobes, the vexillar lobes sometimes connate; corolla with (3-4) 5 free, whitish, linear, clawed, subequal, glabrous petals about 1 mm. wide; stamens 6, 8, or 10, the filaments free, subequal, mostly exceeding the petals, the anthers uniform, subcordiform, basifixed, dehiscing by lateral slits; ovary brevi-stipitate, usually 3-5-ovulate, the style short, glabrous, the stigma minute, terminal; fruit elongate, laterally compressed, samaroid with marginal wings, commonly 3-5-seeded; seeds compressed fusiform or oblong, the hilum apical.

Type species: M. fastigiata Freire Allemão.

Key to species

- Leaflets 1.5-2.7 cm. long, 1-1.5 cm. wide, acute to obtuse; fruit 7-8 mm. wide, the wings about 2 mm. wide, the seminiferous body 3.5-4 mm. wide; ovary lightly pubescent, glabrescent; flowers Dec.-Jan. Brazil: Rio de Janeiro.
1. M. fastigiata.
- Leaflets (2-) 2.5-9 cm. long, 1.5-6 cm. wide, acute to acuminate, occasionally obtuse or emarginate; fruit 10-20 mm. wide, the wings 3-6 mm. wide, the seminiferous body 3-9 mm. wide; ovary glabrous.
- Fruit with body 8-9 mm. wide; leaves 3-4-foliolate, the axis 1.5-4 cm. long; flowers Sept. Brazil: eastern São Paulo.
3. M. leprosus.
- Fruit with body 3-6 mm. wide; leaves (1-) 4-9-foliolate, the axis (3-) 5-12 cm. long.
- Length of fruit 4.5-9 cm. long, the width 1-2 cm. the body about 3 mm. wide, the wings 3-6 mm. wide; flowers May-Dec. Brazil: southern Minas Gerais and Rio de Janeiro south to Santa Catarina; Paraguay; northeastern Argentina.
2. M. frondosus.
- Length of fruit 9-19 cm. long, the width 2 cm., the body 5-6 mm. wide, the wings 5-8 mm. wide; flowers Jan.? (fruit in April). Venezuela: western Apure.
4. M. venezuelensis.

1. MYROCARPUS FASTIGIATUS Freire Allemão, Diss. Leg. 26 Oct. 1847.
Type: F. Freire Allemão s.n., Brazil, Rio de Janeiro, "silvis primaevis" (holotype R ?; isotypes BM, G, F neg. 28193 ex G).

Large tree; leaves 5-9 (-10)-foliolate, the axis about 3.5-6.5 cm. long; leaflets ovate to elliptic, 1.5-2.7 cm. long, 1-1.5 cm. wide, acute to obtuse, occasionally emarginate, the base rounded to acute; flowers (in January and February) about 6 mm. long, the calyx 2-3 mm. long; stamens 6, 8, or 10 (fide Freire Allemão); ovary pubescent, glabrescent; fruit about 2.5-6 cm. long, 7-8 mm. wide, the seminiferous body 3.5-4 mm. wide, the wings 2 mm. wide.

Distribution: Known only from the area of the type collection.

Local names: cabureiba; oleo pardo.

2. MYROCARPUS FRONDOSUS Freire Allemão, Diss. Leg. 22 Sept. 1848.
 Type: F. Freire Allemão s.n., Brazil, Rio de Janeiro, "silvis primaevis" (holotype R ?; isotypes BM, G, F neg. 28194 ex G).
- Leptolobium ? punctatum Bentham, Linnaea 22: 526. Sept. 1849.
 Type: A. F. Regnell II.65¹, Brazil, Minas Gerais, Caldas, 26 Aug. 1868 (in flower) (holotype K; isotypes NY, US).
- Myrocarpus paraguariensis Hallier f. Meded. Rijks. Herb. Leiden no. 27: 40. 1915. Type: K. Fiebrig 165 (as 105), Paraguay, Cordillera de Altos, 29 Sept. 1902 (holotype L; isotypes P, US).
- Myrocarpus frondosus forma paraguariensis (Hallier f.) Hassler, Repert. Nov. Spec. Fedde 16: 233. 1919.

Tree, to about 25 m. tall; leaves (1-3) 5-10-foliolate, the axis (3-)5-12 cm. long; leaflets ovate to lanceolate-ovate, (2-) 2.5-7 cm. long, 1.5-3.5 cm. wide, acute to acuminate, sometimes obtuse or emarginate, the base rounded to acute; flowers (in May-December) about 6-8 mm. long, the calyx 3-4 mm. long; stamens 10; ovary glabrous; fruit 4.5-9 cm. long, 1-2 cm. wide, the body about 3 mm. wide, the wings 3-6 mm. wide.

Distribution: In forest, southern Brazil, Paraguay, and northeastern Argentina, at elevations of 100-1200 m.

Local names: cabreuna; cabreúva; ibirá-payo; ivirá-paye; inciense; oleo pardo.

Specimens examined:

BRAZIL: Minas Gerais: Caldas, Regnell II-65¹, 16 Sept. 1865 (US). Rio de Janeiro: Novo Friburgo, Glaziou 11908 (NY, P, US). Petropolis, Glaziou 8446 (NY, US), 11906 (P, US), 11907 (P). Guanabara: Corcovado, Glaziou 6516 (P, US). Tijuca, Glaziou 6837 Tingua, Glaziou 8649 (P). Rio de Janeiro, Horto Florestal, Herb. no. 111914 (NY). São Paulo: Areias, Kuhlmann 4422 (NY, US). Cabreúva, Hoehne 31001 (NY). Souzas, Moreira de Souza s. n. (NY). Parana: Paranagua, Hatschbach 2480 (US). Campina Grande do Sul, Hatschbach 5212 (US), 17812 (US). Morrêtes, Hatschbach 22125 (NY). Santa Catarina: Bom Retiro, Lomba Alta, Smith, Reitz, & Klein 7957 (NY, US). Herval Velho, above Rio Leão, Smith & Reitz 12417 (US). Xanxerê, Smith & Reitz 12496 (NY, US). Itapiranga, Rio Uruguai, Smith & Reitz 12660 (NY, US). São Miguel d'Oeste, Smith & Reitz 12809 (US). Uruguai, Vila Rica, by Rio do Peixe, Smith & Reitz 12924 (US). Rafael, Ibirama, Klein 678 (US). Ibirama, Reitz & Klein 3835 (NY, US). Serra do Matador, Rio do Sul, Reitz & Klein 7246 (NY, US), 8291 (US). Alto Matador, Rio do Sul, Reitz & Klein 7588 (NY, US). Rio do Meio, Lauo Mueller, Reitz & Klein 8228 (NY, US). Sanga da Areia, Jacinto Machado, Reitz & Klein 9290 (NY), 9369 (US).

PARAGUAY: Montes del Parque, Rojas 8649a (US). Villarrica, Jørgensen 3605 in part (US). Limpio, Hassler 3226 (NY, P). Río Paraguay near Concepción, Hassler 7335 (NY, P, US). Yparacay, Hassler 12228 (L, NY, US), 12682 (L, NY, US). Yaguarón, Balansa 3112 (L, P, US).

3. MYROCARPUS LEPROSUS Pickel, Arq. Bot. Estad. S. Paulo, n. ser. 3: 161, tab. 41. 1955. Type: B. J. Pickel s. n., Brazil, São Paulo, Santos, "in fragosis montis S. Theresiae," 29 Sept. 1949 (flowers), 27 Nov. 1949 (immature fruit) (holotype SPSF no. 3462; isotype SP no 53474).

Small trees; leaves 3-4-foliolate, the axis 1.5-3.5 (-4) cm. long; leaflets ovate to obovate, 5-9 cm. long, 3-4.5 cm. wide, acuminate, obtuse, or retuse, the base acute or rounded; flowers (in September) about 8 mm. long, the calyx 4 mm. long; stamens 8-10; ovary glabrous; fruit (immature) 5 cm. long, 1.7 cm. wide, the seminiferous body 8-9 mm. wide, the wings 3-4 mm. wide.

Distribution: Known only from the type collections.

I have not seen material of M. leprosus. The above description is based on that of Pickel. The species seems to be very close to M. frondosus, differing chiefly in the size of the fruit.

4. MYROCARPUS VENEZUELENSIS Rudd, sp. nov.

Type: J. A. Steyermark, G. Bunting, & C. Blanco 101748, Venezuela, Apure, Reserva Forestal San Camilo, "selva siempreverde a lo largo de la Quebrada de la Cristalina hasta la vega del Cerro La Nulita," 250-280 m. alt., 2 April 1968 (holotype US no. 2622434; isotypes NY, VEN).

Arbor, M. frondosus affinis, sed imprimis fructibus majusculis differt.

Tree about 25 m. tall; leaves 5-7-foliolate, the axis 6-12 cm. long; leaflets ovate, 4-8 cm. long, (2-) 2.5-4 cm. wide, acuminate, the base rounded to subcordate; complete flowers not seen, calyx 3-4 mm. long; fruit 9-19 cm. long, 2 cm. wide, the seminiferous body 5-6 mm. wide, the wings 5-6 mm. wide.

Distribution: Known only from the type collection.

Local name: barbasco.